

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04B10/17 H04B10/0

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 669 730 A (FUJITSU LTD) 30 August 1995 (1995-08-30) column 7, line 25 -column 9, line 34; figures 6,7	1-36
X	EP 0 917 313 A (HITACHI LTD) 19 May 1999 (1999-05-19) column 7 -column 8; figures 3,4,23 column 36, line 28 -column 37, line 39	1-36
A	DE 100 10 237 A (SIEMENS AG) 13 September 2001 (2001-09-13) the whole document	1-36
A	US 2001/003486 A1 (MIKAMI SATOSHI) 14 June 2001 (2001-06-14) abstract; figures 1,2,4,5	1-36
	--- -/-- ---	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

19 August 2002

Date of mailing of the international search report

27/08/2002

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Shaan, M

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 314 224 A (STC SUBMARINE SYSTEMS LTD) 17 December 1997 (1997-12-17) abstract; figure 2	1-36

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0669730	A	30-08-1995	JP 3087727 A	12-04-1991
			JP 3137632 B2	26-02-2001
			EP 1063795 A2	27-12-2000
			EP 0669730 A2	30-08-1995
			EP 0675610 A1	04-10-1995
			EP 0674403 A1	27-09-1995
			EP 0676871 A1	11-10-1995
			CA 2024345 A1	01-03-1991
			DE 69029072 D1	12-12-1996
			DE 69029072 T2	03-04-1997
			DE 69033858 D1	20-12-2001
			DE 69033858 T2	13-06-2002
			DE 69033859 D1	20-12-2001
			DE 69033859 T2	13-06-2002
			DE 69033867 D1	03-01-2002
			DE 69033867 T2	27-06-2002
			EP 0415438 A2	06-03-1991
			US 5546213 A	13-08-1996
			US 5526163 A	11-06-1996
			US 5521737 A	28-05-1996
			US 5510931 A	23-04-1996
			US 5535050 A	09-07-1996
			US 5299048 A	29-03-1994
EP 0917313	A	19-05-1999	JP 11150526 A	02-06-1999
			CN 1220531 A	23-06-1999
			EP 0917313 A2	19-05-1999
			US 6400475 B1	04-06-2002
DE 10010237	A	13-09-2001	DE 10010237 A1	13-09-2001
			WO 0165737 A1	07-09-2001
US 2001003486	A1	14-06-2001	JP 2001168799 A	22-06-2001
GB 2314224	A	17-12-1997	EP 0904641 A1	31-03-1999
			WO 9748193 A1	18-12-1997
			JP 2000512452 T	19-09-2000